



NRC Pre-Submittal Meeting

TSTF-591 & Selected 50.69 License Condition Updates

November 14th, 2023

Constellation Fleet Submittal

- Constellation is proposing a Fleet LAR submittal to adopt the recently NRC-approved TSTF-591 "Revise Risk Informed Completion Time (RICT) Program." Constellation is seeking to:
 - Align to Regulatory Guide 1.200, Revision 3 within the TS Section 5.5 RICT Program
 - Establish at each site a RICT Upgrade Reporting Program
- Constellation is also proposing to update certain sites' Facility Operating License conditions for the 10CFR 50.69 Program.
 - Aligns those stations with current reference to RG 1.200 Revision 2 in their 50.69 FOL pages with the changes requested in TSTF-591 (e.g., going forward use of RG 1.200 Revision 3).
- This Pre-Submittal meeting is to propose the submittal strategy to accomplish both objectives and avoid conflicting information in certain sites' TS pages



Fleet Submittal Structure

- Sites that will submit only for TSTF-591:
 - Calvert Cliffs
 - Clinton
 - Ginna
 - FitzPatrick
- Sites that will need to submit for TSTF-591 and submit to update their TS FOL Pages for 50.69
 - Braidwood
 - Byron
 - LaSalle
 - Limerick
 - Nine Mile Point Unit 2
 - Peach Bottom
- Sites that will not be a part of this Fleet submittal and will adopt TSTF-591 in another format or at a later time
 - Dresden
 - Quad Cities
 - Nine Mile Point Unit 1



Affected Pages Per Unit

- Two or Three TS Pages per Unit will be revised.
- Blue Box is TSTF-591 and 50.69 FOL page update and Orange Box is just TSTF-591.

Programs and Manuals

5.5 Programs and Manuals

5.5.20 Risk Informed Completion Time Program (continued)

- For emergent conditions, if the extent of condition evaluation for inoperable structures, systems, or components (SSCs) is not complete prior to exceeding the Completion Time, the RICT shall account for the increased possibility of common cause failure (CCF) by either:
 - 1. Numerically accounting for the increased possibility of CCF in the RICT calculation; or
 - 2. Risk Management Actions (RMAs) not already credited in the RICT calculation shall be implemented that support redundant or diverse SSCs that perform the function(s) of the inoperable SSCs, and, if practicable, reduce the frequency of initiating events that challenge the function(s) performed by the inoperable SSCs.
- The risk assessment approaches and methods shall be acceptable to the NRC. The plant PRA shall be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant, as specified in Regulatory Guide 1.200, Revision 2. Methods to assess the risk from extending the Completion Times must be PRA methods approved for use with this program, or other methods approved by the NRC for generic use; and any change in the PRA methods to assess risk that are outside these approval boundaries require prior NRC approval.

5.6 Reporting Requirements

5.6.9 Steam Generator (SG) Tube Inspection Report (continued)

For Unit 2, the operational primary to secondary leakage rate observed (greater than three gallons per day) in each steam generator (if it is not practical to assign the leakage to an individual steam generator, the entire primary to secondary leakage should be conservatively assumed to be from one steam generator) during the cycle preceding the inspection which is the subject of the report,

Reporting Requirements

For Unit 2, the calculated accident induced leakage rate from the portion of the tubes below 14.01 inches from the top of the tubesheet for the most limiting accident in the most limiting SG. In addition, if the calculated accident induced leakage rate from the most limiting accident is less than 3.11 times the maximum operational primary to secondary leakage rate, the report should describe how it was determined, and

Insert New Program

For Unit 2, the results of monitoring for tube axial displacement (slippage). If slippage is discovered, the implications of the discovery and corrective action shall be provided.

Adoption of 10 CFR 50.69. "Risk-informed categorization and treatment of structures, systems, and components for nuclear power plants"

Constellation Energy Generation, LLC is approved to implement 10 CFR 50.69 using the processes for categorization of Risk-Informed Safety Class (RISC)-1, RISC-2, RISC-3, and RISC-4 structures, systems, and components (SSCs) using:

Probabilistic Risk Assessment (PRA) models to evaluate risk associated with internal events, including internal flooding, and internal fire; the shutdown safety assessment process to assess shutdown risk: the Arkansas Nuclear One. Unit 2 (ANO-2) passive categorization method to assess passive component risk for Class 2, Class 3, and non-Code class SSCs and their associated supports: and the results of non-PRA evaluations that are based on the IPEEE Screening Assessment for External Hazards, i.e., seismic margin analysis (SMA) to evaluate seismic risk, and a screening of other external hazards updated using the external hazard screening significance process identified in ASME/ANS PRA Standard RA-Sa-2009; as specified in the license amendment No. 198, dated October 22, 2018.

The licensee will complete the updated implementation items listed in Attachment 1 of Exelon letter to NRC dated September 13, 2018, prior to implementation of 10 CFR 50.69. All issues identified in the attachment will be addressed and any associated changes will be made, focused scope peer reviews will be performed on changes that are PRA upgrades as defined in the PRA standard (ASME/ANS RA-Sa-2009, as endorsed by RG 1.200, Revision 2), and any findings will be resolved and reflected in the PRA of record prior to implementation of the 10 CFR 50.69 categorization process.

Prior NRC approval, under 10 CFR 50.90, is required for a change to the categorization process specified above (e.g., change from a seismic margins approach to a seismic probabilistic risk assessment approach).



Submittal Proposal – Proposed Timing of 1Q2024.

- Constellation proposes one Fleet License Amendment Request for all sites seeking adoption of TSTF-591, and those updating their FOL 50.69 condition as well.
- Constellation intends to use the NRC approved TSTF-591 Model Application (ML23262B229).
 - Those stations needing 50.69 alignment will be referenced in Section 2.2 'Variations', seeking the additional FOL page change
 - Constellation will ask for the LAR to be reviewed per the CLIIP process
- Benefits
 - Managed under one document/EPID
 - Ensures that Site's TS Section 5.5 and FOL pages are in alignment
 - Maintains the continuity of one PRA model (i.e., same IE/IF and Fire models) to govern both 50.69 and RICT
 - Due to the simplicity of changes with both TSTF-591 and the 50.69 update, the CLIIP process can still be used to process the change
 - Constellation recognizes the potential for a >6month CLIIP approval process.
- Alternate submittal proposal
 - Standalone TSTF-591 for all sites previously identified, requested via CLIIP
 - Standalone 50.69 update LAR for those identified stations needing FOL 50.69 license condition update, requested via expedited review to align with TSTF-591
 - Both documents submitted concurrently







Questions and Discussion